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technique where added optical signals are inputted to the switch device. For example, Kiang shows in Fig. 4 that add ports (408) are inputted to fiber array (403) and subsequently to switch module 401. Similarly, Hill shows in Fig. 2 that Add optical path (240) is inputted to the switch on substrate (210). It should be noted that the technique of inputting Add signals to a fabric is also generally described with regard to Prior Art Fig. 2 of this application. As shown in Fig. 5 of this application, Add signals are not inputted to the switch device, but rather to a combiner which combines the Add signals with signals coming from the switch device. As described on Page 5, lines 13-20 of this application, an advantage of inputting the Add signals to the combiner rather than the switch device is that a drop-only switch device may be employed. This is desirable because a drop-only switch device, such as MEMS or MOEMS with single-sided mirrors, is less complex and less costly.

The distinguishing features described above are recited in the claims. Hence, claim 1 distinguishes the cited references by reciting: a photonic switching fabric operably coupled to drop but not add optical data streams wherein the photonic switching fabric comprises single-sided mirrors configurable to drop but not add optical data streams; and a combiner operably coupled to combine passed optical data streams from the photonic switching fabric together with added optical data streams. (emphasis added) Similarly, claim 8 distinguishes the cited references by reciting: a photonic switching fabric operably coupled to drop but not add optical data streams, wherein the photonic switching fabric comprises single-sided mirrors configurable to drop but not add optical data streams; and a combiner operably coupled to combine passed optical data streams from the photonic switching fabric together with added optical data streams. Claim 16 distinguishes the cited references by reciting: the MEMS comprising single-sided mirrors configurable to drop but not add optical data streams.

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(emphasis added) Claims 17, 22 and 28 include similar distinguishing recitations. Claims 3-7, 10-15, 18-21, and 23-27 are dependent, either directly or indirectly from the independent claims and recite further distinguishing features. For the reasons stated above, Applicant requests that the rejections based on Kiang and Hill be withdrawn.

The Office previously rejected this application based on references including Shiragaki and Mizrahi. However, those references fail to teach use of a drop-only switch having single-sided mirrors employed in the presently claimed manner. For example, Shiragaki describes the optical switch elements as electrooptical devices that change refractive index. (col. 7, lines 35-40) Mizrahi describes the optical switch (70) as being any of a JDS-Fitel SR12AU-20NC (architecture unknown), electromechanical, electro-optic or thermo-optic (col. 4, lines 35-45) Hence, it is reasonable to conclude that Shiragaki and Mizrahi fail to recognize the advantage of using single-sided mirrors for a drop-only device in the manner presently claimed.

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Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Holmes W. Anderson, Applicants' Attorney at 978-264-6664 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

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Date


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